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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE (USPTO)

Serial Number	10/816,375
Confirmation Number	1977
Filing Date	March 31, 2004
Title of Application	MOTE-ASSOCIATED INDEX CREATION
First Named Inventor	Edward Jung
Assignee	Searate Corporation
Group Art Unit	2442
Examiner	Oleg Survillo
Attorney Docket Number	SE1-0011US (formerly 0104-003-001-000000)
Nature of this Document	Informal Communication in Preparation for Examiner Interview

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Dear Examiner Survillo:

[0001] This communication provides an agenda for a telephonic interview of this matter scheduled for **Wednesday, June 24 at 1PM EST.** My contact information is on the signature page of this document. Thank you in advance for talking with me about this matter.

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Interview Agenda:

- Amendment to claims 12, 13, 21-40, 32, 33, and 43 to overcome 35 USC §112 rejections;
- Discussion of exemplary differences between the application/claims and the Mulgund et al (US 2002/0161751 A1) reference in view of the "TAG: a Tiny Aggregation Service for Ad-Hoc Sensor Networks" by Samuel Madden et al. reference for claims 1, 21, 32, 34, 35, 38-42 and 45;
- Discussion of exemplary differences between the application/claims and the Mulgund et al (US 2002/0161751 A1) reference in view of the "TAG: a Tiny Aggregation Service for Ad-Hoc Sensor Networks" by Samuel Madden et al. reference and in further view of "The Design of an Acquisitional Query Processor For Sensor Networks" by Samuel Madden et al. for claims 11, 13, 27, 29-31, and 33; and
- Discussion of whether proposed amendments and newly added claims (46-50) are in condition to obtain allowance.

Proposed Amendments

[0002] Please see the attached Appendix of Proposed Claim Amendments. I would like to discuss your opinion regarding the proposed amendments and new claims in light of the currently cited Mulgund et al (US 2002/0161751 A1), "TAG: a Tiny Aggregation Service for Ad-Hoc Sensor Networks" by Samuel Madden et al. and "The Design of an Acquisitional Query Processor For Sensor Networks" by Samuel Madden et al. reference.

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[0003] Thank you in advance for scheduling time for this interview. I look forward to discussing this with you.

Respectfully Submitted,

Dated: June 21, 2009

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Appendix of Claims with Proposed Amendments

1. (PREVIOUSLY PRESENTED) A method comprising:
determining at least one of a sensing function or a control function at a first mote of a second mote; and
creating one or more mote-addressed content indexes of the second mote at the first mote in response to said determining.
2. (CURRENTLY AMENDED) The method of Claim 1, wherein said determining at least one of a sensing function or a control function at a first mote of a second mote further comprises:
accessing at least one device entity registry of the second mote, wherein the device entity registry includes a network address of the second mote.
3. (CURRENTLY AMENDED) The method of Claim 1, wherein said creating one or more mote-addressed content indexes of the second mote at the first mote in response to said determining further comprises:
inserting at least one device identifier in the one or more mote-addressed content indexes and indicating at least one of: associated format of information of the second mote, a format of commands or availability of information of the second mote.
4. (CURRENTLY AMENDED) A system comprising:
means for determining at least one of a sensing function or a control function of a second mote at a first mote; and
an index creation agent including means for creating one or more mote-addressed content indexes of the second mote at the first mote in response to said determining, wherein at least one of the means for determining or the means for creating includes ~~electrical circuitry~~ hardware for at least one of determining or creating.

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5. (PREVIOUSLY PRESENTED) The system of Claim 4, wherein said an index creation agent including means for creating one or more mote-addressed content indexes of the second mote at the first mote in response to said determining further comprises:
means for creating at least one extensible index.

6. (PREVIOUSLY PRESENTED) The system of Claim 4, wherein said an index creation agent including means for creating one or more mote-addressed content indexes of the second mote at the first mote in response to said determining further comprises:
means for creating at least one of a mote-addressed sensing index or a mote-addressed control index.

7. (PREVIOUSLY PRESENTED) The system of Claim 4, wherein said an index creation agent including means for creating one or more mote-addressed content indexes of the second mote at the first mote in response to said determining further comprises:
means for creating at least one of a mote-addressed routing/spatial index.

8. (PREVIOUSLY PRESENTED) The system of Claim 4, wherein said an index creation agent including means for creating one or more mote-addressed content indexes of the second mote at the first mote in response to said determining further comprises:
means for inserting at least one device identifier in the one or more mote-addressed content indexes.

9. (PREVIOUSLY PRESENTED) The system of Claim 4, wherein said an index creation agent including means for creating one or more mote-addressed content indexes of the second mote at the first mote in response to said determining further comprises:
means for establishing an index-creating agent at the first mote;
means for determining a mote-network address of the second mote; and

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means for associating at least one of a mote-addressed sensing index, a mote-addressed control index, or a mote-addressed routing/spatial index of the second mote with the mote-network address of the first mote.

10. (CURRENTLY AMENDED) The system of Claim 4, wherein said an index creation agent including means for creating one or more mote-addressed content indexes of the second mote at the first mote in response to said determining further comprises:

means for migrating the index creation agent to the first mote;
means for installing the index creation agent at the first mote; and
means for querying at least one device entity at the second mote with the index creation agent.

11. (CURRENTLY AMENDED) The system of Claim 4, wherein said an index creation agent including means for creating one or more mote-addressed content indexes of the second mote at the first mote in response to said determining further comprises:

means for determining a mote-network address of the second mote;
means for determining one or more types of control available from one or more devices of the second mote; and
means for associating at the first mote in the one or more mote-addressed content indexes the one or more types of control available from one or more devices of the second mote with the mote-network address of the second mote.

12. (CURRENTLY AMENDED) The system of Claim 4, wherein said an index creation agent including means for creating one or more mote-addressed content indexes of the second mote at the first mote in response to said determining further comprises:

means for determining a mote-network address of the second mote;
means for determining one or more types of sensing available from one or more devices of the second mote; and
means for associating at the first mote in the one or more mote-addressed content indexes the one or more types of sensing available from one or more devices of the second mote with the mote-network address of the second mote.

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13. (CURRENTLY AMENDED) The system of Claim 4, wherein said an index creation agent including means for creating one or more mote-addressed content indexes of the second mote at the first mote in response to said determining further comprises:

- means for determining a mote-network address of the second mote;
- means for determining one or more types of spatial information related to devices of or proximate to the second mote; and
- means for associating at the first mote the one or more types of spatial information related to devices of or proximate to the second mote with the mote-network address of the second mote.

14. (CURRENTLY AMENDED) The system of Claim 4, wherein said an index creation agent including means for creating one or more mote-addressed content indexes of the second mote at the first mote in response to said determining further comprises:

- means for determining a mote-network address of the second mote;
- means for determining one or more types of absolute or relative spatial information of other motes proximate to the second mote; and
- means for associating at the first mote the one or more types of absolute or relative spatial information of other motes proximate to the second mote with the mote-network address of the second mote.

15. (CURRENTLY AMENDED) The system of Claim 4, wherein said an index creation agent including means for creating one or more mote-addressed content indexes of the second mote at the first mote in response to said determining further comprises:

- means for associating one or more mote-appropriate routing addresses with the one or more mote-addressed content indexes.

16. (CURRENTLY AMENDED) The system of Claim 4, wherein said an index creation agent including means for creating one or more mote-addressed content indexes of the second mote at the first mote in response to said determining further comprises:

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means for associating one or more mote-appropriate routing addresses with at least one directly mote-addressed content index.

17. (CURRENTLY AMENDED) The system of Claim 4, wherein said an index creation agent including means for creating one or more mote-addressed content indexes of the second mote at the first mote in response to said determining further comprises:

means for associating one or more mote-appropriate routing addresses with at least one indirectly mote-addressed content index.

18. (PREVIOUSLY PRESENTED) A system comprising:

a first mote;

at least one mote-appropriate device at a second mote; and

at least one index creation agent resident in the first mote, said at least one index creation agent configured to create at least one of a sensing index, a control index, or a routing/spatial index associated with the second mote.

19. (CURRENTLY AMENDED) The system of Claim 18, wherein said at least one of a sensing index, a control index, or a routing/spatial index associated with the second mote further comprises:

information indicating availability of or format of data from at least one of a light device, an electrical/magnetic device, a pressure device, a temperature device, a volume device, an inertial device, or an antenna at the second mote.

20. (PREVIOUSLY PRESENTED) A system comprising:

a first mote;

at least one mote-appropriate device at a second mote; and

a mote-addressed content index at the first mote having at least one of a sensing function, a control function, or routing/spatial information of said at least one mote-appropriate device at the second mote.

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46. (New) The method of Claim 1, wherein said determining at least one of a sensing function or a control function at a first mote of a second further comprises:

determining availability of information from a sensing device, determining a format of information obtained from the sensing device, determining a format of commands to query the sensing device, or determining an output format of information from the queried sensing device.

47. (New) The method of Claim 46, wherein creating one or more mote-addressed content indexes of the second mote at the first mote in response to said determining comprises:

updating the mote-addressed content index to indicate the availability of information from a sensing device information, the format of information obtained from the device, the format of commands to query the device, or the output format of information from the queried device.

48. (New) The method of Claim **Error! Reference source not found.**, wherein creating one or more mote-addressed content indexes of the second mote at the first mote in response to said determining comprises:

updating the mote-addressed content index to indicate the availability of the light device entity, the electrical device entity, the pressure device entity, the temperature device entity, the volume device entity, the inertial device entity, or the antenna entity.

49. (New) The system of claim 21, wherein the means for creating one or more mote-addressed content indexes of the second mote at the first mote in response to said determining creates the one or more mote-addressed content indexes indicating information pertaining to at least one of a sensing function or a control function of the second mote.

50. (New) The system of claim 49, wherein the information in the one or more mote-addressed content indexes pertaining to at least one of a sensing function or a

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control function indicates an identification of a sensing device of the second mote, and the availability of information from the sensing device, the format of information obtained from the sensing device, the format of commands to query the sensing device, or the output format of information from the queried sensing device.